the southeastern states now have capacity use area programs modeled more or less directly on North Carolina's; all of these states have created capacity use areas in their coastal plains; none have been attempted in the Piedmont or mountains (or for surface water).

It is also clear from the groundwater cases in North Carolina that landowners have no absolute property rights in groundwater. The Supreme Court addressed this question directly in 1924, in the *Rouse* case, and it follows implicitly from the *Bayer* case, where the court allowed one landowner to take the groundwater being used by another landowner without any payment of damages.

## City is unaware of its precarious water supply and leaky pipes until it fails to deliver on promises to new development.

Imagine a medium-sized North Carolina city with a typically aged water distribution system serving 5,000 customers and a water source that was last expanded in the 1950s. The city has worked for years to attract growth, in part by keeping its water rates as low as possible, and always lower than its neighbors. Growth has largely eluded it, and in fact its population has been hurt by the departure in the 1990s of traditional manufacturing jobs. Its water supply has seemed adequate, since its population has been stable or slightly declining. In 2009, however, it has the good fortune of learning that a major manufacturing facility is interested in locating just outside the city limits, and wants water supplied by the city. After this announcement, several developers come forward with major subdivision proposals, also just outside the city, also wanting city water and sewer. How likely is it that the city is actually prepared to

annex and serve or simply to serve these new customers? Might they make a commitment they cannot meet?

A city of this size in North Carolina that operates a water treatment and distribution facility is required to prepare a Local Water Supply Plan (LWSP). These plans are a laudable effort by North Carolina to improve water supply planning and ensure that local government and large community water systems do not get caught short of water or of treatment or distribution capacity. However, they have not fully achieved their potential as planning tools. It is quite likely that the city in this scenario never fully adopted its plan, that it never really came to the attention of its governing board, and that the city never actually invested in the supply and infrastructure it would need to meet the growth assumptions and aspirations that it has had.

Further, it is quite likely that this city, by managing primarily to keep water rates low, has not invested in the operations, maintenance, repair, and replacement of its water infrastructure. An audit of its water system would quite likely find large amounts of unaccounted-for water—representing lost revenue and actual lost supply. It would be, unfortunately, not at all surprising to find that this city could not easily keep the commitments it would want to make to supply water to the new developments proposed in its region. The economic development and development approval processes in North Carolina are not always connected to water supply availability, because of the historical assumption of ample water.